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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,141	11/25/2003	Ellen Kempin	13906-152001 / 2003P00627	4314

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FISH & RICHARDSON, P.C.	TRUONG, LECHI	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/720,141	KEMPIN, ELLEN
	Examiner	Art Unit	
	LeChi Truong	2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *29 October 2007*.
2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-29* is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) *1-29* is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a) ☐ All b) ☐ Some * c) ☐ None of:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____.
      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)
1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1.   Claims 1-29 are presented for the examination.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2.   Claims **1-6, 9-16, 18, 19, 20-22 , 27-29** are rejected under 35 U.S.C. 103(a) as being

unpatentable over   Lee et al (US 6,192,413 B1) in view of Dillow et al (US. Patent 7, 140025)

and further in view of Wayne et al (US. Patent 5,006,983).

As to claim 1, Lewis teaches the invention substantially as claimed including: message

queue (queues, col 2, ln 30-33/ queue 62, col 6, ln 55-57), a message (messages, col 2, l 29-35/

message 54, ln 55-57), a first system executing a first software application of an enterprise

information technology system to a second system executing a second software application of

the enterprise information technology system, (col 2, ln 27-32), one object type (the message

type destination, col 2, ln 35-40/ the message type, col 6, ln 50-56/ the heartbeat message , col 7,

ln 35-39), wherein each message queue is used only for one object type(col 2, ln 44-46/ col 6,

ln 55-57/ col 7, ln 34-40), an indication(the router table 4 of fig.3A indicates that it is the "U"

queue identifier which is the selected destination for the incoming message 54, col 6, ln 53-58),

receive(the router table 44 is loaded into the memory, col 6, ln 35-37/ "U"queue

identifier[indicator] located in the table), an indication of an object type(col 6, ln 50-60) ;

identify a message queue used for the object type(col 6, ln 50-60/ col 2, ln 27-45).

Lee does not explicitly teach object type associated with a message independently of the

message an the software application , in response to the indication, the registration related action

affecting processing by middleware of messages stored in the identified queue and messages

destined to the identified queue. However, Dillow teaches object type associated with a message

independently of the message and software application, in response to the indication, the

registration related action affecting processing by middleware of messages stored in the

identified queue and messages destined to the identified queue (The TSCM server 220 executes

on the transaction server 204 and coordinates the communications of service request messages

and service response messages to and from available service applications, including applications

208, 210, and 212, col 4, ln 40-44/ Fog. 2/ Fig. 3/request message for a particular service, col 4,

ln 49-52/ each service application registers with the TSCM server 220 as part of its initialization

procedure. Preferably, the registration process determines the service type, and therefore, the

service queue, that the service application supports, col 5, ln 30-33/ As the TSCM server 220

receives service request messages, the messages are validated and forwarded to the appropriate

service queue, preferably in accordance with service type (e.g., 1-800 service, VPN service, and

CC service). An exemplary service queue is a first-in, first-out linked list, array, or other data

structure for ordering the receipt of messages, col 5, ln 45-51/col 9, ln 50-55, When a service

update message (e.g., a registration or deregistration message) is retrieved from the TSCM queue

324, the monitor thread 312 modifies the service status memory block (i.e., the Status block 416

of FIG. 4) to reflect a change in active services. If the service update message indicates that a

new service type is added, the monitor thread creates a new service queue for the new service

type and service application, col 10, ln 26-33/ each service application 208 and 212 receives

service request messages from a single service queue relating to a single service type, col 4, ln

59-65).

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to modify the teaching of Lee to incorporate the feature of object type associated with

a message independently of the message, in response to the indication, the registration related

action affecting processing by middleware because this prevents a first network connection from

degrading the performance of a second network connection.

Lee and Dillow do not teach the object type including a category of enterprise application

data. However, Wayne teaches a message independently of the software application, the object

type including a category of enterprise application data (the queues   include a group of queues

for each service type and the assignment means assigns an individual to a queue within the group

of queues that corresponds to the service type assigned to that individual. The communication

devices are pagers and the communication means communicates with the pagers by sending a

message notifying the individual that a service resource is available to serve that individual. The

message also identifies the location of the service resource that is available to serve that

individual. The service resources are employees of business, col 2, ln 29-35/After a customer's

pager (or a customer's name) has been entered into CHAPS 2 by the reception agent and before

that customer is paged, CHAPS 2 categorizes the status of that customer in accordance with one

of three states, namely, "Shopping", "Waiting" and "Angry". As a rule, when the customer is first

entered into CHAPS 2, that customer is assigned to "Shopping" status for a preselected period of time, which is referred to as shopping time. While a customer has "Shopping" status, col 11, ln 65-67 to col 12, ln 1-8/ Each of the 27 queues 102 is classified according to transaction type (i.e., Sales, Service or Holiday), according to service level (i.e., General, Priority or Immediate), and according to customer status (i.e., "Shopping", "Waiting" or "Angry"). The 27 queues represent every different possible combination of those three characteristics. When a customer is entered into CHAPS 2, that customer is initially assigned to the appropriate one of the nine "shopping" queues. As time passes, link machine 26 reassigns customers to other of the queues 102 and when an agent becomes available, selects the next customer to be served from an appropriate one of the other queues. With some exceptions that will become apparent, customers are selected from the "Waiting" queues and the "Angry" queues on a first-in-first-out basis, i.e., col 12, ln 56-67 to col 13, ln 1-5).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Lee and Dillow with Wayne to incorporate the feature of the software application, the object type including a category of enterprise application data because this helps assure that people are served in order of their arrival and permits customers to relax a little more during the wait.

As to claim 2, Lee teaches identified message queue (col 6, ln 50-53) and Dillow teaches perform a registration-related action comprise one or more code segments configured to cause de-registration of the message storage such that processing of messages from the message storage is ceased (col 6, ln 30-40).

As to claim 3, Dillow teaches registration of the identified message queue such that processing of messages from the identified message queue is started (col 5, ln 30-35).

As to claim 4, Dillow teaches perform a registration-related action to enable solving a problem with transferring enterprise application data having the object type to the second application (col 6, ln 35-40).

As to claim 5, Lee teaches identifying the message queue comprises identifying a message queue used for the object type based on a name of the object type being included as part of a name of the message queue (col 9, ln25-31/ col 2, ln 38-48).

As to claim 6, Lee teaches identifying the message queue comprises identifying a message queue used for the object type by accessing a data structure having data that associates a name of the message queue and a name of an object type (col 6, ln 50-57/ col 2, ln 38-48).

As to claims 9-14, they are apparatus claims of claims 1-3; therefore, they are rejected for the same reasons as claims 1-3 above.

As to claim 15, it is an apparatus claim of claims 1-3; therefore, it is rejected for the same reasons as claims 1-3 above. In additional, Dillow teaches receiving an indication of registration (col 10, ln 26-33), deregister (col 6, ln 35-40), based on stored associations between object type and function modules, a specific one of the function module for identify a message queue(specifically service request messages and service response messages, is communicated through the read and write threads[functions modules] corresponding to a given logical communications connection/ The read thread 316 is responsible for receiving service request messages from the CSCM 308 in association with the logical communications connection that was validated by the main thread 302, col 9, ln 15-19/ the read thread 316 deposits the service

request message on the appropriate service queue 326,col 9, ln 50-55) and Lee teaches returning

a queue name of the message queue used for the indicated object type (col 10, ln 18-24).

As to claims 16, 18-19, they are apparatus claims of claims 1, 4, 15; therefore, they are

rejected for the same reasons as claims 1, 4, 15 above.

As to claim 20, Lee teaches receive an indication of an object type associated with a

message independently of the message from a user (col 5, ln 35-45).

As to claim 21, Dillow teaches software situated between the first software application

and the second software application (col 2, ln 10-15).

As to claim 22, Dillow teaches prohibiting messages destined to the de-registered

message queue from being added to the de-registered message queue (col 5, ln 35-41).

As to claim 27, Dillow teaches identify a message queue used for the object type and

located in a message hub systems, the message hub system receiving messages from the first

system and routing the received messages to the second system(col 5, ln 42-50).

As to claim 28, Ye teaches one of a customer type, and employee type, an organization

type, a business partner type, and a sales order type(col 11, ln 65-67 to col 12, ln 1-8).

As to claim 29, Ye teaches notify a user of the identified message queue(col 13, ln 29-

39), perform the registration -related action on the identified queue after receiving a user

confirmation(col 12, ln 60-57).

3.   Claims 7, 8, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over   Lee et al

(US 6,192,413 B1) in view of   Dillow et al (US. Patent 7, 140025) in view of Wayne et al (US.

Patent 5,006,983), as applied to claim 1 above, and further in view of Hoffman (US 6,940814

B1).

As to claim 7, Lee, Wayne and Dillow do not explicitly teach a sales system. However,

Hoffman teaches a sale system (business units, col 1, and ln 42-45).

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to modify the teaching of Lee, Wayne, Dillow and Hoffman because Hoffman's sale

system would improve the efficiency of Lee, Wayne and Dillow's systems by providing certain

quality of service for applications within the subnetwork, such as priority and bandwidth

reservation.

As to claim 8, Hoffman teaches a message includes enterprise application data (col 1, ln

42-45).

As to claim 17, it is an apparatus claim of claim 8; therefore, it is rejected for the same

reason as claim 8 above.

4.   Claims **23, 24-25** are rejected under 35 U.S.C. 103(a) as being unpatentable over   Lee

et al (US 6,192,413 B1) in view of Dillow et al (US. Patent 7, 140025) and further in view of Ye

(US 6760911 B1).

As to claim 23, Lewis teaches the invention substantially as claimed including: message

queue (queues, col 2, ln 30-33/ queue 62, col 6, ln 55-57), a message (messages, col 2, 1 29-35/

message 54, ln 55-57), a first system executing a first software application of an enterprise

information technology system to a second system executing a second software application of

the enterprise information technology system, (col 2, ln 27-32), one document type (the message

type destination, col 2, ln 35-40/ the message type, col 6, ln 50-56/ the heartbeat message , col 7,

ln 35-39), wherein each message queue is used only for one object type(col 2, ln 44-46/ col 6,

ln 55-57/ col 7, ln 34-40), an indication(the router table 4 of fig.3A indicates that it is the "U"

queue identifier which is the selected destination for the incoming message 54, col 6, ln 53-58),

receive(the router table 44 is loaded into the memory, col 6, ln 35-37/ "U"queue

identifier[indicator] located in the table), an indication of an object type(col 6, ln 50-60) ;

identify a message queue used for the object type(col 6, ln 50-60/ col 2, ln 27-45).

Lee does not explicitly teach object type associated with a message independently of the

message and software application , in response to the indication, the registration related action

affecting processing by middleware of messages stored in the identified queue and messages

destined to the identified queue. However, Dillow teaches object type associated with a message

independently of the message and software application, in response to the indication, the

registration related action affecting processing by middleware of messages stored in the

identified queue and messages destined to the identified queue (The TSCM server 220 executes

on the transaction server 204 and coordinates the communications of service request messages

and service response messages to and from available service applications, including applications

208, 210, and 212, col 4, ln 40-44/ Fog. 2/ Fig. 3/request message for a particular service, col 4,

ln 49-52/ each service application registers with the TSCM server 220 as part of its initialization

procedure. Preferably, the registration process determines the service type, and therefore, the

service queue, that the service application supports, col 5, ln 30-33/ As the TSCM server 220

receives service request messages, the messages are validated and forwarded to the appropriate

service queue, preferably in accordance with service type (e.g., 1-800 service, VPN service, and

CC service). An exemplary service queue is a first-in, first-out linked list, array, or other data

structure for ordering the receipt of messages, col 5, ln 45-51/col 9, ln 50-55, When a service

update message (e.g., a registration or deregistration message) is retrieved from the TSCM queue

324, the monitor thread 312 modifies the service status memory block (i.e., the Status block 416

of FIG. 4) to reflect a change in active services. If the service update message indicates that a

new service type is added, the monitor thread creates a new service queue for the new service

type and service application, col 10, ln 26-33/ each service application 208 and 212 receives

service request messages from a single service queue relating to a single service type, col 4, ln

59-65).

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to modify the teaching of Lee to incorporate the feature of object type associated with

a message independently of the message, in response to the indication, the registration related

action affecting processing by middleware because this prevents a first network connection from

degrading the performance of a second network connection.

Lee and Dillow do not teach inbound and outbound message queues used for document,

the outbound message queued being located at the first system, the inbound message queue being

located at the second system other that the first system, and inbound message queue receiving

message from the outbound message queue. However, Ye teaches inbound and outbound

message queues used for document , the outbound message queued being located at the first

system, the inbound message queue being located at the second system other that the first

system, and inbound message queue receiving message from the outbound message queue(MQ

Series servers are installed on both end points. Each has one queue manager active, the Local

Queue Manager 60 in the local environment 30 and the Remote Queue Manager 70 in the remote

environment 50. The two queue managers 60 & 70 communicate with each other in both

directions, over configured MQ channels 90. The Messaging API Framework 20 acts as the

interface between the CORBA-based application 10 and the MQ Series Messaging System

represented by its two illustrated queue managers 60 & 70. The queue manager that an

application directly connects to is referred to as the local queue manager; while the other queue

manager is the remote queue manager. Queues owned by the local queue manager are local

queues while those owned by the remote queue manager are remote queues. Unless otherwise

noted, for purposes of this disclosure, the point of view taken will be defined as that of the

CORBA-based application 10. Hence its environment 30 will be described as the "local"

environment and its queue manager 60 will be described as the "local" queue manager, col 3, ln

50-67/ Fig. 1) .

It would have been obvious to one of the ordinary skill in the art at the time the invention

was made to modify the teaching of Lee and Dillow with Ye to incorporate the feature of

inbound and outbound message queues used for document , the outbound message queued being

located at the first system, the inbound message queue being located at the second system other

that the first system, and inbound message queue receiving message from the outbound message

queue because this allows distributed C++ applications to communicate with little effort.

As to claim 23, Dillow teaches the hub message system receiving messages from the fist

system and routing the received message to the second system.

As to claim 24, Lee teaches receive an indication of an object type associated with a message independently of the message from a user (col 5, ln 35-45).

As to claim 25, Dillow teaches software situated between the first software application and the second software application (col 2, ln 10-15).

5.   Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over   Lee et al (US 6,192,413 B1) in view of Dillow et al (US. Patent 7,140025) in view of Ye(US 6760911 B1), as applied to claim 23 above, and further in view of Lodrige (US 6920635 B1).

As to claim 26, Lee, Dillow and Ye do not teaches the hub message system receiving messages from the outbound message queue located at the first system and routing the received messages to the inbound message queue located at the second system . However, Lodrige teaches the hub message system receiving messages from the outbound message queue located at the first system and routing the received messages to the inbound message queue located at the second system (propagation controller 216[hub message] facilitates concurrent propagation of messages between the first and second software modules 204 and 206 by permitting concurrent access to the synchronization queue 210 and/or synchronization queue 214, col 4, ln 25-35/ Fig. 2).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the teaching of Lee, Dillow and Ye to incorporate the feature of hub message system receiving messages from the outbound message queue located at the first system and routing the received messages to the inbound message queue located at the second system

because this provides the improved methods for managing data propagation between software
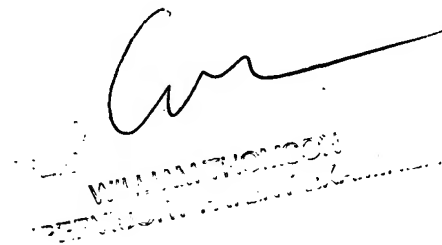
modules.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to LeChi Truong whose telephone number is (571) 272 3767. The

examiner can normally be reached on 8 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Thomson, William can be reached on (571) 272 3718. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR of Public PAIP. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIP

system, contact the Electronic Business Center (EBC) at 866-217-9197(toll-free).

LeChi Truong

December 20, 2007